

Title (en)

COOLED PISTON FOR AN INTERNAL-COMBUSTION ENGINE AND METHOD FOR PRODUCING SAME

Publication

EP 0000592 B1 19810107 (DE)

Application

EP 78200004 A 19780601

Priority

DE 2730120 A 19770704

Abstract (en)

[origin: EP0000592A1] 1. A cooled piston for internal combustion engines, particularly for diesel engines, which consists entirely or in part of ferrous material and is formed in the piston head (3) behind the ring portion with a cooling passage (8, 22), which forms a continuous peripheral ring at least adjacent to the uppermost ring groove (12), which piston comprises freely suspended piston pin bosses (1), which are connected by ribs (2, 4, 23, 24) to the inside surface of the piston head and to the piston skirt (5), which is formed with apertures (7) in registry with the openings of the piston pin bosses (6), the cooling passage being connected to the coolant-circulating system by suitable coolant supply and drain conduits (9, 10, 26, 27), which extend substantially parallel to the piston axis, characterized in that the piston consists of a plurality of parts (3, 5, 17, 18, 20), which are firmly joined by an intermetallic interlayer at the interfacial planes (16, 19, 21).

IPC 1-7

F02F 3/22; B23P 15/10

IPC 8 full level

B23P 15/10 (2006.01); **F02F 3/00** (2006.01); **F02F 3/22** (2006.01); **F02P 3/10** (2006.01); **F01P 3/10** (2006.01); **F02B 3/06** (2006.01)

CPC (source: EP)

F02F 3/003 (2013.01); **F02F 3/22** (2013.01); **F02P 3/10** (2013.01); **F02B 3/06** (2013.01); **F02F 2003/0061** (2013.01); **F02F 2200/04** (2013.01); **F05C 2201/0448** (2013.01)

Cited by

EP0019323A1; EP1061249A3; CN102483009A; CN102667124A; DE102004038465A1; US9970384B2; WO2011056822A3; WO0220971A1; US8807109B2; US10590884B2

Designated contracting state (EPC)

DE FR GB NL SE

DOCDB simple family (publication)

EP 0000592 A1 19790207; EP 0000592 B1 19810107; BR 7804259 A 19790417; DE 2730120 A1 19790125; DE 2860397 D1 19810226; JP S5428949 A 19790303

DOCDB simple family (application)

EP 78200004 A 19780601; BR 7804259 A 19780703; DE 2730120 A 19770704; DE 2860397 T 19780601; JP 8083878 A 19780703